

7th NOAA Testbed and Proving Grounds Workshop Agenda NCWCP Apr 5-6, 2016

Tuesday, April 5, 2016

7:30 – 8:00 **Registration, Coffee, tea, and light refreshments**
8:00- 8:30 Workshop Welcome and Overview, **Paula Davidson**
SESSION I **Roundups**

8:30-10:30 **Testbed Roundups #1 – 6 (15 mins + 5 Q&A)**
8:30 Climate Testbed, **Jin Huang**
8:50 Development Testbed Center, **Bill Kuo**
9:10 Coastal and Ocean Modeling Testbed, **Becky Baltes**
9:30 Joint Hurricane Testbed, **Shirley Murillo**
9:50 Joint Center for Satellite Data Assimilation, **James Yoe**
10:10 Aviation Weather Testbed, **Joshua Scheck**

10:30-10:50 **Break**

10:50-12:30 **Testbed Roundups #7- 11 (15 mins + 5 Q&A)**
10:50 Hazardous Weather Testbed, **Steven Weiss and Gabe Garfield**
11:10 Hydro-Meteorological Testbed, **David Novak and Allen White**
11:30 Operations Proving Ground, **Kim Runk**
11:50 GOES-R Proving Ground, **Steve Goodman**
12:10 Space Weather Prediction Testbed, **Rodney Viereck** (remote)

12:30 – 12:50 **Break, Pick up Working Lunch**

SESSION II: **Science Theme Session (Theme topics below)**

12:50- 1:00 Introduction

1:00- 2:40 **Science Theme Papers #1-5 (15 mins + 5 Q&A)**

1:00 *Demonstration of Advanced Ensemble Prediction Services for NWS Hydrometeorological Forecast Operations*, **Kelly Mahoney**
1:20 *Digital Aviation Services in the Aviation Weather Testbed*, **Steven Lack**
1:40 *Evaluation of Emerging Flash Flood Decision-Making Products and Tools in the HMT Multi-Radar Multi-Sensor Hydro Experiment*, **Steven Martinaitis**
2:00 *Stochastic Physics Approach for Use in the Next Generation Ensemble Forecasting System*, **Isidora Jankov** (remote)
2:20 *Forecaster Decision-Making with Automated Probabilistic Guidance in the 2015 Hazardous Weather Testbed Probabilistic Hazard Information experiment*, **Christopher Karstens**

2:40-3:00 **Break**

3:00-5:00 Science Theme Papers #6-11 (15 mins + 5 Q&A)

- 3:00 *Combined ENSO, MJO, and trend influences on temperature and precipitation for Weeks 3-4, Daniel Harnos*
- 3:20 *Transfer of Probabilistic Winter Weather Products from WPC Test Bed to Operations, Michael Bodner*
- 3:40 *Testing and Evaluation of Four-Dimensional Ensemble Variational Data Assimilation for Regional Weather Forecasts, Hui Shao*
- 4:00 *The Experimental Neighborhood Probabilistic Excessive Rainfall Outlook as Gleaned from the 2014 and 2015 Flash Flood and Excessive Rainfall Experiments, Sarah Perfater*
- 4:20 *Improving probabilities for seasonal prediction based on the North American Multi Model Ensemble (NMME), Huug Van den Dool*
- 4:40 *IOOS Coastal and Ocean Modeling Testbed for Puerto Rico and the Virgin Islands: Field Cases and Cyber-Infrastructure, Andre Van der Westhuysen*

5:00 – 5:15 General Q&A for science theme presentations

5:15-5:30 Day 1 Wrap up/ Day 2 Preview/ Next Steps

6:00 Dinner on your own (or organized by participants)

[Wednesday, April 6, 2016](#)

7:45-8:15 Coffee, tea, and light refreshments

SESSION III Emerging and Affiliated Capabilities

Emerging capability:

8:15 Arctic Testbed

8:35-10:00 **Posters:**

- **Affiliated programs**
- - NASA Sport: **Bradley Zavodsky**
 - CSTAR: **Christopher Hedge**
 - VLAB: **John Schattel**
 - JPSS: **Bill Sjoberg**
- **Science Theme**
 - *Assessment of Distributed Hydrological Modeling for NWS Flash Flood Operations, Lynn Johnson*
 - *Importance of high-resolution modeling for storm surge, hurricane waves, and coastal water levels and currents in Puerto Rico and the U.S. Virgin Islands, Juan Gonzalez-Lopez*
 - *Radar Based Rain Rate Estimators and their Variability due to Rainfall Type: An Assessment using Hydrometeorology Testbed Data from the Southeastern United States, Sergey Matrosov*
 - *Application of a Hybrid Dynamical-Statistical Model for Week 3 to 4 Forecast of Atlantic/Pacific Tropical Storm and Hurricane Activities, Jae-Kyung Schemm*
 - *Impact of Microphysical Consistency between Subgrid and Grid-Resolved Cloud Parameterizations on QPF and Simulated Radar Reflectivity, Evelyn Grell*

SESSION IV Discussion

10:00 - 12:00 Panel: TBPG managers; followed by facilitated discussion with workshop participants

1. Based on what we heard and saw yesterday/today, what areas of emerging science and technology are on the horizon that merit priority attention? (Particular emphasis work that may be transitioned to operations/application relatively soon.)
2. For each of the areas identified, what is the expected path to operations and, if known, an estimated timeframe?
3. What (if any) issues (technical or other barriers to implementation) need to be addressed in order to maximize the use and impact of these new capabilities?

12:00-12:15 Wrap up, Review and Next Steps

12:15 Adjourn Annual workshop

Science Theme

1. Communicating Probabilistic Environmental Intelligence and Forecast Information: Focus on testing projects that concern communicating probabilistic decision support. This session is for testing projects across-NOAA, including (but not limited to) forecast information intended for NWS operations.